

Claims

- [c1] A novel, economically viable method for obtaining composition containing 70 to 95% C_{24} – C_{36} alkanols along with small percentage of other fatty alcohol by liquid carbon dioxide extraction and further purification by enzyme
- [c2] The claim in 1 contains selectively 75 to 90% of C_{28} alkanols with 5–15% of other fatty alcohol especially C_{24} – C_{36} particularly Tetra-
cosanol, 1-Hexacosanol, 1-Heptacosanol,
1-Triacontanol, 1-Tetratriacontanol collectively known as Policosanol
- [c3] The said enzymatic process in claim in 1 uses immobilized hydrolyzing enzyme, preferably cellulase, lipase or mixture and more preferably lipase in concentrations of 0.1–10% w/w, which is added to the entrainer or co-solvent.
- [c4] The said claim in 1 is obtained from plant and animal waxes, preferably sugarcane, bees wax, rice bran or other plant or animal sources

- [c5] The said alkanols in claim 1 are useful in cosmetic applications in concentrations of 0.05–10%w/w, more preferably 1–5%.
- [c6] The said alkanols in claim 5 have anti-seborrhea properties in concentrations of 0.5–10% preferably 1–4%w/w in cosmetic formulations.
- [c7] The said alkanols in claim 5 have anti-bacterial activity particularly against *Propionibacterium acnes* and useful in anti-acne preparations in concentrations of 1–10%, preferably in concentrations of 2–5%w/w in cosmetic formulations.
- [c8] The said alkanols in claim 5 have excellent antidandruff and anti-seborrhic activity and is useful for preventing dandruff in hair care applications
- [c9] The said alkanols in claim 5 have excellent moisturizing properties useful in preventing dry skin, dry skin itching and scaling in concentrations of 0.5–10%, preferably 1–4%w/w in cosmetic formulations.
- [c10] The said alkanols in claim 5 can be used as solubilizing agent for oil soluble compounds in cosmetic formulations including steroids, phytoestrogens.
- [c11] The said alkanols in claim 5 can be used in combinations

with other moisturizers like coriander seed oil, avacado oil, sandal seed oil, xyloglucans, beta-glycans amongst others

- [c12] The said alkanols in claim 5 can be used in combination with other known tyrosinase inhibitors, elastase inhibitors, collagenase inhibitors, anti-phlogistic, anti-aging and anti-oxidants for obtaining synergistic benefits.
- [c13] The said alkanols in claim 5 can be used in the form of o/w or w/o emulsion, creams, lotions, chap sticks, lipsticks, deodorant sticks, gels, sprays and aerosols amongst others.
- [c14] Alkanols of claim 5 derived from vegetable sources can be used in cosmetic preparations to replace animal derived lipid components such as lanolin or wool fat.